

PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : C12Q 1/68		A3	(11) International Publication Number: WO 00/18966 (43) International Publication Date: 6 April 2000 (06.04.00)
 (21) International Application Number: PCT/US99/22975 (22) International Filing Date: 29 September 1999 (29.09.99) (30) Priority Data: 60/102,381 29 September 1998 (29.09.98) US (63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Application US 60/102,381 (CON) Filed on 29 September 1998 (29.09.98) (71) Applicant (<i>for all designated States except US</i>): ARCH DEVELOPMENT CORPORATION [US/US]; 5640 South Ellis Avenue, Chicago, IL 60637 (US). (72) Inventors; and (75) Inventors/Applicants (<i>for US only</i>): WANG, San, Ming [-/US]; - (US). FEARS, Scott [-/US]; - (US). ROWLEY, Janet, D. [-/US]; - (US). (74) Agent: HIGHLANDER, Steven, L.; Arnold, White & Durkee, P.O. Box 4433, Houston, TX 77210 (US).		 (81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> (88) Date of publication of the international search report: 27 July 2000 (27.07.00)	
 (54) Title: A NEW STRATEGY FOR GENOME-WIDE GENE ANALYSIS: INTEGRATED PROCEDURES FOR GENE IDENTIFICATION (57) Abstract The present invention is drawn to methods for genome-wide index in a particular cell type, and for genome-wide identification of differentially expressed genes. Also provided is an improved set of poly-dT primers anchored at their 3' ends.			

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
AT	Austria	FR	France	LU	Luxembourg	SN	Senegal
AU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav Republic of Macedonia	TM	Turkmenistan
BF	Burkina Faso	GR	Greece	ML	Mali	TR	Turkey
BG	Bulgaria	HU	Hungary	MN	Mongolia	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MR	Mauritania	UA	Ukraine
BR	Brazil	IL	Israel	MW	Malawi	UG	Uganda
BY	Belarus	IS	Iceland	MX	Mexico	US	United States of America
CA	Canada	IT	Italy	NE	Niger	UZ	Uzbekistan
CF	Central African Republic	JP	Japan	NL	Netherlands	VN	Viet Nam
CG	Congo	KE	Kenya	NO	Norway	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NZ	New Zealand	ZW	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's Republic of Korea	PL	Poland		
CM	Cameroon	KR	Republic of Korea	PT	Portugal		
CN	China	KZ	Kazakhstan	RO	Romania		
CU	Cuba	LC	Saint Lucia	RU	Russian Federation		
CZ	Czech Republic	LI	Liechtenstein	SD	Sudan		
DE	Germany	LK	Sri Lanka	SE	Sweden		
DK	Denmark	LR	Liberia	SG	Singapore		

INTERNATIONAL SEARCH REPORT

Int'l. Application No.

PCT/US 99/22975

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C12Q1/68

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 C12Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 93 18176 A (DANA FARBER CANCER INST INC) 16 September 1993 (1993-09-16) see claims	1
X	LIANG P ET AL: "DIFFERENTIAL DISPLAY OF EUKARYOTIC MESSENGER RNA BY MEANS OF THE POLYMERASE CHAIN REACTION" SCIENCE, US, AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE,, vol. 257, no. 5072, 14 August 1992 (1992-08-14), pages 967-971, XP000508268 ISSN: 0036-8075 the whole document	1,20,26, 28
X	US 5 807 680 A (ERLANDER MARK G ET AL) 15 September 1998 (1998-09-15) see whole doc. esp. claims	1,20,26, 28
-/-		



Further documents are listed in continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

19 May 2000

Date of mailing of the international search report

26/05/2000

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl.
Fax: (+31-70) 340-3016

Authorized officer

Müller, F

INTERNATIONAL SEARCH REPORT

International Application No.

PCT/US 99/22975

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>DIATCHENKO L ET AL: "SUPPRESSION SUBTRACTIVE HYBRIDIZATION: A METHOD FOR GENERATING DIFFERENTIALLY REGULATED OR TISSUE-SPECIFIC cDNA PROBES AND LIBRARIES" PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA, US, NATIONAL ACADEMY OF SCIENCE, WASHINGTON, vol. 93, 1 June 1996 (1996-06-01), pages 6025-6030, XP002911922 ISSN: 0027-8424 cited in the application the whole document</p>	
A	<p>VELCULESCU V E ET AL: "SERIAL ANALYSIS OF GENE EXPRESSION" SCIENCE, US, AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE,, vol. 270, 20 October 1995 (1995-10-20), pages 484-487, XP002053721 ISSN: 0036-8075 cited in the application the whole document</p>	
A	<p>US 5 545 522 A (BARCHAS JACK D ET AL) 13 August 1996 (1996-08-13) see claims and figures</p>	

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application

PCT/US 99/22975

Patent document cited in search report	Publication date	Patent family member(s)			Publication date
WO 9318176	A 16-09-1993	US 5262311 A	16-11-1993		
		CA 2102784 A	12-09-1993		
		EP 0592626 A	20-04-1994		
		JP 2843675 B	06-01-1999		
		JP 7500735 T	26-01-1995		
		US 5599672 A	04-02-1997		
		US 5665547 A	09-09-1997		
		US 5965409 A	12-10-1999		
US 5807680	A 15-09-1998	US 5459037 A	17-10-1995		
		US 6030784 A	29-02-2000		
		AU 687127 B	19-02-1998		
		AU 1055195 A	29-05-1995		
		AU 6711098 A	09-07-1998		
		CA 2174966 A	18-05-1995		
		EP 0726946 A	21-08-1996		
		FI 962000 A	10-05-1996		
		JP 9509306 T	22-09-1997		
		NO 961902 A	12-07-1996		
		WO 9513369 A	18-05-1995		
US 5545522	A 13-08-1996	US 5716785 A	10-02-1998		
		US 5891636 A	06-04-1999		